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(54) Title: HETEROCYCLIC METALLOCENES AND POLYMERIZATION CATALYSTS

(57) Abstract

A new class of heterocyclic metallocenes, a catalytic system containing them and a process for polymerizing addition polymerizable monomers using said catalytic system are disclosed; the heterocyclic metallocenes correspond to the formula (I): $Y_jR''_iZ_{jj}$ MeQ_kP₁ wherein Y is a coordinating group containing a six π electron central radical directly coordinating Me, to which are associated one or more radicals containing at least one non-carbon atom selected from B, N, O, Al, Si, P, S, Ga, Ge, As, Se, In, Sn, Sb and Te; R" is a divalent bridge between the Y and Z groups; Z is a coordinating group, optionally being equal to Y; Me is a transition metal; Q is halogen or hydrocarbon substituents; P is a counterion; i is 0 or 1; j is 1-3; jj is 0-2; k is 1-3; and 1 is 0-2.

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